

## CLAIMS

5

1. A thickener for concentration of a fibre suspension containing relatively coarse undesired particles, comprising:
  - a housing (1),
  - a rotor (2) arranged in the housing,
  - 10 - a screen member (4) attached to the rotor and having screen passages dimensioned for separating the fibre suspension into a first fraction of the fibre suspension passing through the screen member and substantially containing fibres, and a second fraction not passing through the screen member and
  - 15 containing the coarse undesired particles,
  - a stationary thickening member (9) surrounding the rotor and provided with a multiplicity of through holes, and
  - means (6, 10), arranged in the housing for supplying the first fraction of the fibre suspension to the thickening member, so that the thickening member separates the first fraction into a third fraction passing through the holes of the thickening member, and a fourth fraction not passing through the holes of the thickening member, wherein the holes of the thickening member (9) are dimensioned such that liquid
  - 20 but not fibres is allowed to pass through the thickening member, whereby the fourth fraction of the fibre suspension produced during operation is constituted by thickened fibre pulp free from undesired coarse particles.
- 25 30 2. A thickener according to claim 1, wherein the screen member (4) is tubular and coaxially attached to the rotor (2).
3. A thickener according to claim 1 or 2, wherein the

stationary thickening member (9) is tubular and coaxially surrounds the rotor (2).

4. A thickener according to any of claims 1-3, wherein the  
5 fibre suspension to be thickened has a fibre concentration in  
the range of 0,5-5%.

10

15

20

25

BEST AVAILABLE COPY